

## **REMARKS**

This paper is being provided in response to the Office Action dated October 27, 2010, for the above-referenced application. In this paper, Applicants have amended claims 19 and 23-26 to clarify that which Applicants consider to be the presently-claimed invention. Applicants respectfully submit that the amendments to the claims are fully supported by the originally-filed specification.

The objection to claims 23 – 26 for informalities has been addressed by amendments contained herein. Applicants have clarified that claims 23-26 are directed to an information providing system having the recited features. Accordingly, Applicants respectfully request that the objection be reconsidered and withdrawn.

The rejection of claims 2-6 and 9-26 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,334,126 to Nagatomo (hereinafter "Nagatomo") is hereby traversed and reconsideration is respectfully requested.

Independent claim 4 recites a search device providing a search results to a requesting terminal unit, the search results including at least one address corresponding to content provided by a content providing server capable of providing content, the data provided by the content providing server corresponding to information showing a capacity of the requesting terminal unit included in an information request command along with a key word from the requesting terminal unit. The search device includes a search server that provides a crawling means for searching predetermined addresses corresponding to the content by using the information showing the

capacity of the requesting terminal unit according to a typical model of the requesting terminal unit in a model group, the model group being set according to the capacity, a search index holding the predetermined addresses corresponding to the content obtained by the crawling means in correspondence to an identifier that identifies the requesting terminal unit in the model group at a time of crawling, a searching means for gobbling down the predetermined addresses in the search index which correspond to content corresponding to the key word and the identifier included in the information request command from the requesting terminal unit, and a search result generating means for generating a search result including the predetermined addresses gobbled down by the searching means. Claims 2, 3, 9 and 10 depend, directly or indirectly, from independent claim 4.

Independent claim 5 recites an information providing system, that includes a content providing server capable of providing content, the content provided by the content providing server including data corresponding to information showing a capacity of a terminal unit included in an information request command and a search device, coupled to the content providing server, that provides a crawling means for searching at least one address of the content by using the information showing the capacity of the terminal unit according to a typical model of the terminal unit in a model group, the model group being set according to the capacity a search index holding the at least one address of the content obtained by the crawling means which correspond to content corresponding to an identifier that identifies the terminal unit in the model group at a time of crawling, and a searching means for gobbling down the at least one address of the content in the search index in correspondence to the identifier included in the information request command from the terminal unit.

Independent claim 6 recites an information searching system, that includes a content providing server capable of providing content, the content provided by the content providing server including data corresponding to information showing a capacity of a terminal unit included in an information request command and a key word; and a search device, coupled to the content providing server, that provides a crawling means for searching at least one predetermined address corresponding to the content by using the information showing the capacity of a typical model of the terminal unit in a model group, the model group being set according to the capacity, a search index holding the at least one predetermined address of the content obtained by the crawling means in correspondence to a an identifier that identifies the terminal unit in the model group at a time of crawling, a searching means for gobbling down the at least one predetermined address in the search index which correspond to content corresponding to the key word and the identifier included in the information request command from the terminal unit, and a search result generating means for generating a search result including the predetermined addresses gobbled down by the searching means. Claims 13 and 14 depend from independent claim 6.

Independent claim 15 recites a method for providing a search service. The method includes providing a server that includes data, receiving, at the server, a request generated for a requesting device corresponding to the data in the server, wherein the request includes capacity information of the requesting device and requested content, searching the data in the server to provide search results according to the capacity information of the requesting device and according to the requested content, and sending the search results to the requesting device in

response to the request, wherein the search results correspond to the capacity information of the requesting device and the requested content. Claims 16, 17 and 18 depend from independent claim 15.

Independent claim 19, as amended herein, recites a method for requesting data from a server. The method includes sending a request generated for a requesting device to the server, where the request corresponds to data in the server, and where the request includes capacity information of the requesting device and requested content and receiving, at the requesting device, search results from the server, wherein the search results correspond to the capacity information of the requesting device and to the requested content. Claims 20, 21 and 22 depend from independent claim 19.

Independent claim 23, as amended herein, recites an information providing server system that includes at least one information providing server that includes a storage portion that stores information corresponding to a request generated for a requesting device, the request including capacity information of the requesting device and requested content; a search device that searches the information in the storage portion to provide search results according to the capacity information of the requesting device and according to the requested content; and a content server, coupled to the storage portion, that provides search results to the requesting device in response to the request, where the search results vary according to the capacity information of the requesting device and according to the requested content. Claims 24, 25 and 26 depend from independent claim 23.

Nagatomo discloses a data output system in which a server is connected to a database which holds data of plural types of data formats. The server searches the database based on the content of a search request made by a search requester, and outputs the search result after performing conversion and edition on the search result in accordance with the ability, function and/or capacity of a communication terminal to which the search result is to be output. (See, e.g., Abstract of Nagatomo).

Applicants' presently-claimed invention is directed to content search. Use cases might include searching a database for a ringtone or, maybe, running a Google search to find some requested content to render on a receiving device (cell phone). The presently-claimed invention addresses the problem that all content available through a general search may not be suitable for rendering on a particular device due to device capabilities (e.g. screen size, audio capabilities etc). The presently-claimed invention solves this problem by limiting the search result, in connection with the actual obtaining of search results, based on device capabilities. In particular, as discussed in detail below, Applicants' present claims require:

- (1) searching a database based on capabilities of the device and storing results in a search index (i.e. crawling means feature); and
- (2) search results in search index using keywords (gobbling down feature).

This two stage search procedure is an efficient way to search which only delivers content which can be rendered on the device.

Specifically, Applicants recite that content provided by the content providing server corresponds to information showing a capacity of the requesting terminal unit. Applicants'

recited search server includes a crawling means for searching predetermined addresses corresponding to said content by using the information showing the capacity of the requesting terminal unit. A search index holds the predetermined-addresses corresponding to the content obtained by said crawling means in correspondence to an identifier that identifies the requesting terminal unit in the model group at a time of crawling. A searching means gobbles down the predetermined addresses in said search index which correspond to content corresponding to the key word and the identifier included in the information request command from the requesting terminal unit. Thus, Applicants recited claims provide for searching content with is suitable for the device, according to capacity information thereof, and then a search of key words is performed within the resulting search results obtained by the above-noted crawling means.

Nagatomo recognizes that different devices have different capabilities and that it is unhelpful to send search results which are not able to be rendered (see col. 1, lines 45-55 of Nagatomo). However, Nagatomo addresses this identified problem by, after performing a content search, *converting* any files which are in an incompatible format for the device in order to put them in a state in which they can be rendered. Every embodiment of Nagatomo includes this conversion step. Accordingly, Nagatomo's system appears to:

- (1) search for 'content' and identify the format of the content to produce a search result (see col. 2, lines 22-24);
- (2) compare the format of the content/search result with the data format requested by the device (see col. 2, lines 25-30); and
- (3) convert the format of the search result to match that of the device (see col. 2, lines 30-33).

Nagatomo's content search appears suggested as key word/subject based; moreover, it is explicitly clear from Nagatomo that Nagatomo's system is expected to receive search results which are not compatible with the device and then convert the results in order to allow the device to be able to render the received content. As noted above, Nagatomo's operation is summarized in the Abstract:

a server...searches the database based on the content of a search request made by a search requested, and *outputs the search result after performing conversion and edition on the search result* in accordance with the ability, function and/or capacity of a communication terminal... (emphasis added).

This disclosure of Nagatomo does not disclose Applicant's recited features noted above and, particularly, does not offer the advantages of Applicant's recited features in connection with efficient searching.

As with prior discussions concerning other cited prior art (e.g., Sugimoto) during prosecution of this application, Nagatomo's system operates in a different manner than that which is recited by Applicants. Nagatomo retrieves content that corresponds to key words, creates a retrieval result list, and *then* converts/edits the search results in order to be rendered according to terminal capabilities. A general content search component, like that described in Nagatomo, searches for *all* content that meets the requested content search criteria (e.g., contains a particular key word / subject matter content criteria) whether or not the content can be rendered on the receiving device. Only after this search does the device of Nagatomo then perform additional steps to convert the search results based on the capabilities of the receiving device. Nagatomo's system does not offer the advantages in reduced processing time and

communications across a network that are provided by Applicant's recited system that provides searching for content based on the capabilities of the receiving device.

Thus, Applicants' presently-claimed invention differs from Nagatomo's disclosure in that Applicants' initial search identifies content which is suitable for rendering on the device, thereby advantageously reducing processing time and communications across a network. Applicants' presently-claimed invention provides a search result that initially creates a result subset that only includes content suitable for the device and then allows for searching that subset for particular keywords. An advantage to Applicants' recited claims is that once the initial search has been performed, the user can run multiple key word searches on the filtered data without extended searches on the whole database across the network. Specifically, Applicants submit that Nagatomo does not teach or fairly suggest at least the features of: a crawling means for searching predetermined addresses corresponding to said content by using the information showing the capacity of the requesting terminal unit; a search index for holding the predetermined-addresses corresponding to the content obtained by said crawling means in correspondence to an identifier that identifies the requesting terminal unit in the model group at a time of crawling; a searching means for gobbling down the predetermined addresses in said search index which correspond to content corresponding to the key word and the identifier included in the information request command from the requesting terminal unit, as recited by Applicants.

The above-noted arguments are discussed principally in connection with independent claim 4. Applicants submit that the other independent claims (noting the amendments contained herein to independent claims 19 and 23), and claims depending therefrom, contain similar

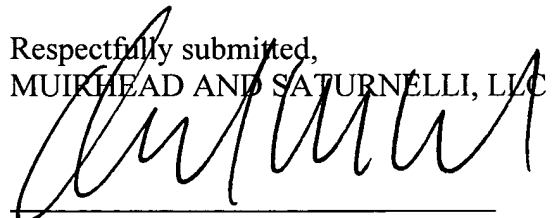


features to those discussed above and respectfully submit that the above-noted remarks apply equally to these claims.

Accordingly, Applicants respectfully submit that Nagatomo does not teach or fairly suggest at least the above-noted features as claimed by Applicants. In view of the above, for reasons set forth above, Applicants respectfully request that this rejection be reconsidered and withdrawn.

Based on the above, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 508-898-8603.

Respectfully submitted,  
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